

Title (en)  
APPARATUSES AND METHODS FOR REDUCING PAGING FOR EXTENDED DISCONTINUOUS RECEPTION (EDRX) MOBILE STATION (MS) TO RECEIVE MOBILE TERMINATED (MT) SHORT MESSAGES (SM)

Title (de)  
VORRICHTUNGEN UND VERFAHREN ZUR REDUZIERUNG VON FUNKRUF FÜR MOBILSTATION (MS) MIT ERWEITERTEM DISKONTINUIERLICHEM EMPFANG (EDRX) ZUM EMPFANG VON AN MOBILTELEFONE GERICHTETEN (MT) KURZNACHRICHTEN (SM)

Title (fr)  
APPAREILS ET PROCÉDÉS DE RÉDUCTION DE RADIOMESSAGERIE POUR STATION MOBILE À RÉCEPTION DISCONTINUE ÉTENDUE POUR RECEVOIR DES MESSAGES COURTS MOBILES TERMINÉS

Publication  
**EP 3169090 A1 20170517 (EN)**

Application  
**EP 16170896 A 20160523**

Priority  
• US 201562249646 P 20151102  
• US 201615137442 A 20160425

Abstract (en)  
A Serving GPRS Support Node (SGSN) including a controller and a non-transitory computer readable storage medium is provided. The non-transitory computer readable storage medium stores instructions which, when executed by the controller, cause the controller to perform steps including: receiving a signaling request message from a mobile communication device via an access network, determining whether the mobile communication device operates in an idle mode with Extended Discontinuous Reception (EDRX) and whether there is any Mobile Terminated (MT) Short Message (SM) pending for the mobile communication device, in response to receiving the signaling request message, and transmitting a signaling response message indicating the pending of the MT SM to the mobile communication device via the access network in response to the mobile communication device being configured to operate in the idle mode with EDRX and there being at least one MT SM pending for the mobile communication device.

IPC 8 full level  
**H04W 4/14** (2009.01); **H04W 52/02** (2009.01); **H04W 4/70** (2018.01); **H04W 76/04** (2009.01)

CPC (source: CN EP US)  
**H04W 4/12** (2013.01 - CN US); **H04W 4/14** (2013.01 - EP US); **H04W 4/16** (2013.01 - CN); **H04W 52/0216** (2013.01 - EP US); **H04W 52/0229** (2013.01 - EP US); **H04W 68/02** (2013.01 - EP US); **H04W 76/28** (2018.01 - EP US); **H04W 4/70** (2018.01 - EP US); **Y02D 30/70** (2020.08 - EP US)

Citation (search report)  
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• [A] "3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Study on system impacts of extended Discontinuous Reception (DRX) cycle for power consumption optimization (Release 13)", 3GPP STANDARD; 3GPP TR 23.770, 3RD GENERATION PARTNERSHIP PROJECT (3GPP), MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CEDEX ; FRANCE, vol. SA WG2, no. V13.0.0, 21 September 2015 (2015-09-21), pages 1 - 42, XP050996025  
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• [A] ERICSSON: "Updated conclusions of extended DRX solutions", vol. SA WG2, no. San Francisco, USA; 20131111 - 20131115, 12 November 2013 (2013-11-12), XP050744166, Retrieved from the Internet <URL:http://www.3gpp.org/ftp/Meetings\_3GPP\_SYNC/SA/SA2/Docs/> [retrieved on 20131112]  
• [A] "3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Study on Machine-Type Communications (MTC) and other mobile data applications communications enhancements (Release 12)", 23 December 2013 (2013-12-23), XP050764436, Retrieved from the Internet <URL:http://www.3gpp.org/ftp/tsg\_sa/WG2\_Arch/Latest\_SA2\_Specs/Rel-12/> [retrieved on 20131223]

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3169090 A1 20170517**; **EP 3169090 B1 20181205**; CN 106658436 A 20170510; TW 201717691 A 20170516; TW I609600 B 20171221; US 2017127469 A1 20170504; US 9713193 B2 20170718

DOCDB simple family (application)  
**EP 16170896 A 20160523**; CN 201610546003 A 20160712; TW 105121070 A 20160704; US 201615137442 A 20160425